

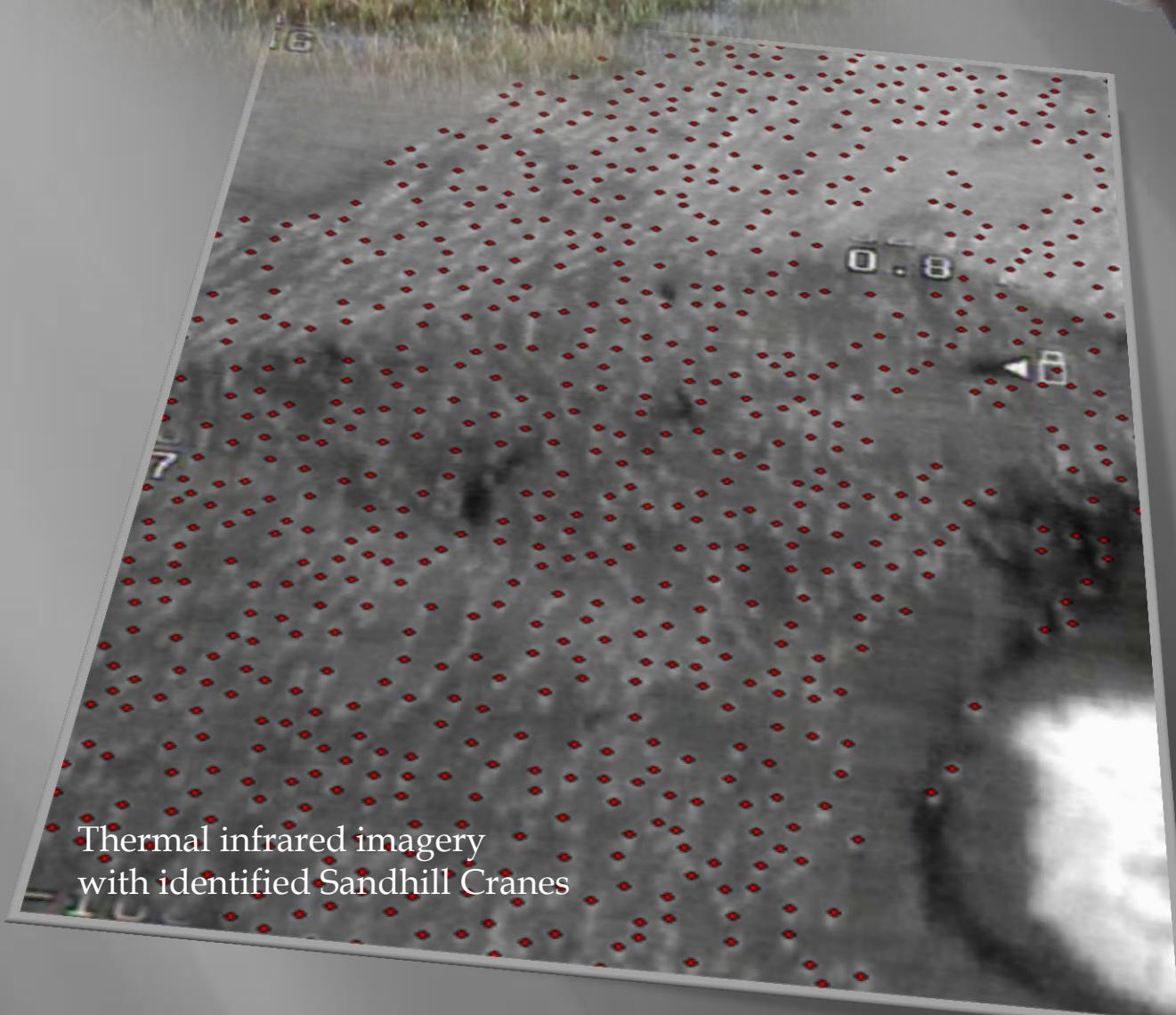


Monte Vista National Wildlife Refuge - Sandhill Cranes Population Estimates Using Small Unmanned Aerial Systems

March 20-25, 2011



The Department of the Interior - U.S. Geological Survey
Raven RQ-11A Unmanned Aerial System



Thermal infrared imagery
with identified Sandhill Cranes



The 4.2 lb. electric motor Raven RQ-11A
hand launched with a natural color or thermal
infrared camera payload



The Department of the Interior - U.S. Geological Survey, U.S. Fish and Wildlife Service and the Aviation Management Directorate, in coordination with the Federal Aviation Administration, performed the first small Unmanned Aerial System proof-of-concept operation to collect data over Sandhill Crane migration sites to derive population estimates on the Monte Vista National Wildlife Refuge, Monte Vista, Colorado. For more information: <http://uas.usgs.gov>